

1 **DIRECT TESTIMONY**

2 **OF**

3 **NEVILLE O. LORICK**

4 **ON BEHALF OF**

5 **SOUTH CAROLINA ELECTRIC & GAS COMPANY**

6 **DOCKET NO. 2004-178-E**

7  
8 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION WITH**  
9 **SOUTH CAROLINA ELECTRIC & GAS COMPANY.**

10 **A.** Neville O. Lorick, 1426 Main Street, Columbia, South Carolina. My position is  
11 President and Chief Executive Officer of South Carolina Electric & Gas Company  
12 (SCE&G, Company).

13 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND**  
14 **PROFESSIONAL EXPERIENCE.**

15 **A.** I have a B.S. in mechanical engineering from the University of South Carolina. I  
16 began my employment with SCE&G in April, 1971, as a student assistant and was hired  
17 full-time in January, 1975, as an engineer. In March, 1978, I became the Assistant Plant  
18 Manager for our Canadys Station Fossil Steam Plant, and in September, 1982, was  
19 promoted to plant manager. In July, 1988, I was promoted to General Manager, Fossil  
20 and Production Operations. In this position, I was responsible for all of the Company's  
21 fossil fuel plants and the Fossil Production Corporate Staff. In December, 1992, with  
22 reorganization, my title was changed to Manager of Production Support. In December,  
23 1994, I was named Manager of Operation Services and my responsibilities included the

1 management of support staff and their interface with the Fossil/Hydro departments. In  
2 July, 1995, I was promoted to the position of Vice President of Fossil & Hydro  
3 Operations. In December, 2000, I was elected by the SCANA Board of Directors to be  
4 the President and Chief Operating Officer of SCE&G.

5 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

6 **A.** The purpose of my testimony is to report on the state of our Company and to  
7 provide an introduction to the rate request before the Commission. I will generally  
8 discuss with you the customer growth on our system, our operating performance, and the  
9 Company's need for additional revenue in order to meet the service needs of our  
10 customers and the economic needs of our Company. Additionally, I will discuss our  
11 Jasper County Generating Facility and other capital projects dealing with operational  
12 reliability and environmental compliance.

13 **Q. HAVE THERE BEEN ANY SIGNIFICANT SYSTEM CHANGES SINCE THE**  
14 **COMPANY'S LAST RATE CASE IN 2002?**

15 **A.** We continue to experience residential, commercial, and industrial growth in our  
16 service areas and we continue to invest in our capacity to meet that growth. In Docket  
17 Number 2002-223-E, I discussed with the Commission the fact that our reserve margins  
18 were reaching unacceptable levels for system reliability and that with the Jasper facility  
19 our reserve margins will be restored to the 12% - 18% we need to maintain.

20 In the last two years (ending December 31, 2003) we have added 23,380 new  
21 retail customers and annual retail kilowatt sales have risen by 5.03%. As of March 31,  
22 2004, we had 489,226 residential electric customers, 80,105 commercial customers, and  
23 1,118 industrial customers.

1   **Q.     PLEASE DISCUSS THE JASPER COUNTY GENERATING PLANT.**

2   **A.**           This Commission addressed the siting of our Jasper County Generating Plant in  
3           Docket Number 2001-420-E. Subsequently, in Dockets 2004-2-E and 2004-126-E, the  
4           Commission addressed the fuel supply necessary to operate the Jasper facility. In Docket  
5           Number 2002-223-E, we requested inclusion in the rate base those expenses associated  
6           with construction-work-in-progress (CWIP) on this project as of December 31, 2002. In  
7           its Order No. 2003-38, the Commission recognized and approved the Company's strategy  
8           for meeting its generation requirements through the Jasper Project, specifically holding  
9           that the plant was properly sized to take advantage of economies of scale in construction  
10          which saved our customers \$111,000,000 in construction costs.

11   **Q.     EXPLAIN HOW THE ADDITION OF THE JASPER PLANT AFFECTS THE**  
12   **COMPANY'S RESERVE MARGIN.**

13   **A.**           With the addition of the Jasper Plant, our reserve margin this summer is expected  
14          to be 19.8%. This is a little outside our target range of 12-18%, but by 2005, our  
15          customers' load growth will bring our reserve margin back in the target range. It is  
16          expected to be 17.7% and to continue to fall each year until we need to add more  
17          capacity. Our reserve margin this summer will be out of our target range only because, as  
18          already noted, we made a conscious decision to capture economies of scale in building  
19          the Jasper Plant.

20                As an integral part of that decision we sought and found in the market place an  
21          opportunity to sell some of our system capacity in a firm contract. All of the revenue  
22          from this sale is credited directly to the benefit of our native load customers. Moreover,  
23          in this contract, we reserved the right to recall this power in the event it is needed by our

1 native load. In addressing this off-system sale of 250 MW, the Commission found in  
2 Order No. 2003-38, “[t]he Company has been able to sell 250 MW of the system capacity  
3 to third parties based on the reserves Jasper will represent when it comes on line.  
4 Customers will be credited 100% of the value of this sale.”

5 **Q. WHEN WILL SCE&G NEED TO ADD MORE CAPACITY?**

6 **A.** Our territorial load is predicted to grow at about 2.3% per year over the next ten  
7 years. The 2004 Integrated Resource Plan, which we filed with the Commission in  
8 February of this year, indicates the next addition of capacity will be 150 megawatts in  
9 2009 and a similar amount in each of the subsequent three years. We continue to conduct  
10 studies to determine what type of capacity is most economical and the exact timing of its  
11 placement.

12 **Q. PLEASE DESCRIBE THE STATUS OF THE NOW COMPLETED JASPER**  
13 **COUNTY GENERATION PROJECT.**

14 **A.** On May 1, 2004, the Jasper County Generating Plant began commercial  
15 operations. By way of a brief review for the Commission, this plant, which is located  
16 near Hardeeville, South Carolina, is composed of three combustion turbine-generators,  
17 three heat recovery steam generators (HRSGs) and one steam turbine-generator. The  
18 HRSGs transfer the heat in the exhaust from the combustion turbines to heat water in the  
19 power cycle to produce steam, which then propels the steam turbine to generate  
20 additional electricity. The combustion turbines are equipped with inlet chilling to  
21 maximize the output of the plant during hot weather. The combined-cycle, natural gas-  
22 fired plant generates approximately 775 net megawatts during the winter and 750 net  
23 megawatts during the summer. The plant has the capability to generate additional

1 “peaking” output of up to 120 megawatts using supplementary firing. This is  
2 accomplished by burning additional fuel in burners located in the inlet duct to the  
3 HRSGs, which produces more steam and more output from the steam turbine-generator.  
4 The peak output from the plant is approximately 900 megawatts during the winter and  
5 875 megawatts during the summer. The addition of the Jasper Plant to the Company’s  
6 generating system brings SCE&G’s total generating capacity up to approximately 5,800  
7 megawatts.

8 **Q. WHAT TYPE OF FUEL DOES THE NEW PLANT USE?**

9 **A.** Natural gas is the primary fuel for the plant with distillate (No. 2) fuel oil as a  
10 back-up. High pressure natural gas is supplied to the site through a connection to  
11 interstate pipelines. The interstate pipelines deliver natural gas from both the Gulf of  
12 Mexico region and from the liquefied natural gas (LNG) facility near Savannah, Georgia.  
13 Distillate fuel is delivered to the site from local terminals in truck tankers and stored on  
14 the plant site in above-ground storage tanks.

15 **Q. WHAT ENVIRONMENTAL CONTROLS ARE INCLUDED IN THE JASPER**  
16 **PLANT?**

17 **A.** The Jasper Plant has state of the art environmental controls. The plant uses dry  
18 low NOx combustors when burning natural gas and water injection for NOx control when  
19 burning distillate oil. In addition, the HRSGs include selective catalytic reactor (SCR)  
20 systems for further reduction of NOx emissions. Lower sulfur distillate oil is used to  
21 minimize oxide of sulfur emissions when burning oil. A closed cycle cooling system  
22 with evaporative cooling towers is used to transfer heat from the steam turbine  
23 condensers to the atmosphere. Water “blowdown” from the cooling towers and steam

1 cycle is returned to the water treating facility for recycling, reducing the volume of  
2 wastewater generated. The small amount of wastewater generated by the facility is  
3 delivered to the Hardeeville wastewater collection and treatment system for processing.

4 **Q. WHAT IS THE TOTAL COST OF THE JASPER PROJECT?**

5 **A.** The total investment in the Jasper project as of May 31, 2004, is \$506 million.

6 The total construction cost of the Jasper Generating Plant amounts to approximately \$447  
7 million. The Commission will recall that \$276 million of the plant construction costs  
8 were included in the Company's last rate case. The amount above construction cost  
9 includes the substation required to interconnect with Santee Cooper, Allowance for Funds  
10 Used During Construction (AFUDC), test power fuel, and spare parts inventory.

11 **Q. WHAT IS THE STATUS OF THE SALUDA DAM REMEDIATION PROJECT?**

12 **A.** We anticipate completion of this extensive remediation project by May 2005. In  
13 fact, in May of this year, FERC authorized the start of refill. As we have previously  
14 discussed with the Commission, from the early days of the Company's history, the  
15 impoundment of the Saluda River, resulting in the formation of Lake Murray, provided  
16 SCE&G with a source of hydroelectric generating capacity. The Saluda Dam, completed  
17 in 1930, is a semi-hydraulic fill structure which was typical of the construction  
18 technology popular in the early 1900's. Since the primary purpose for which the dam  
19 was originally constructed was hydroelectric generation, the dam is under the jurisdiction  
20 of the Federal Energy Regulatory Commission (FERC). Today, the lake is also a source  
21 of cooling water for the McMeekin Steam Plant, drinking water for the City of Columbia  
22 and adjacent communities, and a major recreation area and residential community with  
23 statewide economic benefits.

1   **Q.     PLEASE GIVE US SOME BACKGROUND ON THIS PROJECT.**

2   **A.**           Beginning in 1989, the FERC required that a series of geo-technical investigations  
3           be undertaken to assess the safety of the existing Saluda Dam, particularly under seismic  
4           stress. In this part of South Carolina, seismic design bases for critical facilities are, for all  
5           practical purposes, governed by a postulated re-occurrence of the 1886 Charleston  
6           Earthquake. The Charleston Earthquake is estimated to have had a magnitude in the  
7           range of 7.1 to 7.3 on the Richter scale. This event was established as the Design Seismic  
8           Event (DSE) for assessing the integrity of the Saluda dam.

9           A comprehensive liquefaction analysis and a post-earthquake stability analysis  
10          were conducted via the DSE. If the DSE occurs, these analyses show that the  
11          embankment will experience liquefaction. In the unlikely event that the Saluda Dam  
12          should fail, approximately 150,000 people would be in jeopardy, water supplies for  
13          Columbia and surrounding communities would be lost, there would be extensive negative  
14          environmental impacts and millions of dollars would be lost from the local economy.  
15          Consequently, the FERC ordered a major remediation project for the Saluda Dam to be  
16          implemented in the 2002 to 2005 time period.

17          After considerations, both technical and financial, the FERC determined that the  
18          remediation should be accomplished by the construction of a new, supplementary “dry  
19          dam” immediately downstream of the existing dam. The existing embankment remains  
20          in place and will function as the primary impounding barrier for Lake Murray. The dry  
21          dam will become a water retention structure if the Saluda Dam fails.

1 The dry dam will consist of about 5,500 linear feet of rock fill and about 2,300 linear feet  
2 of roller compacted concrete (RCC). The final project will involve the placement of 1.3  
3 million cubic yards of RCC and 3.5 million cubic yards of rock fill.

4 As Mr. Timmerman has commented, and as Mr. Addison explains in more detail,  
5 this project is projected for completion with no cost to our customers. Therefore, we are  
6 seeking no recovery for this project in this docket.

7 **Q. HAS SCE&G UNDERTAKEN ANY ADDITIONAL PLANT IMPROVEMENTS**  
8 **DUE TO ENVIRONMENTAL REQUIREMENTS?**

9 **A.** Yes. Since passage of The Clean Air Act of 1977 and its amendments in 1990,  
10 the federal government has prescribed protective guidelines aimed at preventing  
11 significant deterioration of air quality with particular concern about nitrous oxides, sulfur  
12 oxides, and particulate matter emissions released from coal-fired power plants.  
13 Reduction of nitrous oxides is particularly important so that ambient air quality will meet  
14 the standard for ozone established by the Environmental Protection Agency (EPA).  
15 Similarly, reduction in sulfur oxides and particulate matter has a positive effect on the  
16 surrounding air quality. Accordingly, SCE&G, over the last decade, has undertaken  
17 major construction projects at its existing and new coal-fired plants to comply with  
18 federal regulations that safeguard air quality.

19 At Williams Station the Company has installed a SCR system to comply with the  
20 2004 State Implementation Plan (SIP) mandate to reduce NOx emissions. The Williams  
21 Station is owned by South Carolina Generating Company, Inc. (GENCO), a wholly-  
22 owned SCANA subsidiary. GENCO sells to SCE&G the entire capacity and output from  
23 the Williams Station under a formula rate approved by the Federal Energy Regulatory



1 Commission. Therefore, Williams Station is included in SCE&G's generating capacity  
2 and performance data. The cost for this project is approximately \$67.3 million.  
3 Associated with this effort, new induced draft (ID) fans are required to ensure that the  
4 load will be maintained once the SCR is fully installed. For economic reasons, variable  
5 speed drives are also included in order to obtain the most efficient operation possible with  
6 the new fans. These fans are sized to accommodate a future scrubber installation to meet  
7 sulfur dioxide requirements. The cost associated with the work on fans and drives is  
8 about \$8.5 million. Finally, the economizer has been replaced at Williams Station to  
9 lower the exit gas temperature to a level that will not damage the catalyst in the new  
10 SCR. This has a cost of \$5.4 million. The enhancements at Williams Station total  
11 approximately \$81.2 million.

12 Since the 2002 electric rate case, the Company has continued the construction of  
13 SCRs and baghouses for the two Wateree Station units in order to comply with mandated  
14 reductions in NOx emissions to meet ozone standards. For these SCRs and baghouses,  
15 the Company spent approximately \$93.2 million in 2002 and 2003. The ID fans and air  
16 preheaters were also replaced to accommodate the installation of the SCRs. Larger  
17 capacity ID fans were necessary to accommodate the additional pressure drop caused by  
18 the SCRs and baghouses and to support the installation of future scrubbers. The air  
19 heaters had to be relocated to the discharge side of the SCRs, since the new design  
20 configuration changed the flow path of the air and the metallurgy of the air heater  
21 baskets. The new design better handles the possible seepage of ammonia from the SCRs.  
22 This work on fans and air heaters cost approximately \$8.5 million in 2002 and 2003. The

1 total expenditures for all these environmentally related enhancements at Wateree amount  
2 to approximately \$101.7 million.

3 At McMeekin Station, the Company has modified the ash handling systems from  
4 a wet ash process to a dry ash system. This modification has cost about \$16.8 million.  
5 Further, SCE&G is installing separated overfire air systems (SOFA) at both McMeekin  
6 Units and planning to install selective non-catalytic reactors (SNCR) to reduce NOx  
7 emissions to meet the Clean Air Act NOx emission rate regulations and the NOx ton  
8 emissions required by the SIP mandate. This work will cost approximately \$6.3 million.

9 Finally, SCE&G replaced the baghouse bags, metal thimbles, tubesheets, and all  
10 material and insulation in the 24 lower ash collection hoppers at the Cope Plant.  
11 Completion of this work occurred in 2003. These environmentally-related improvements  
12 cost approximately \$4.5 million.

13 **Q. HAVE THERE BEEN ANY OTHER SIGNIFICANT CONSTRUCTION**  
14 **PROJECTS FOR ELECTRIC OPERATIONS SINCE THE LAST RATE CASE?**

15 **A.** Since 2001 the Company has completed several other construction projects that  
16 are part of the on-going maintenance of its electric systems. The Company has  
17 constructed two new 230kV, 37.7 mile long, transmission lines connecting our Jasper  
18 Generating Plant to SCE&G's transmission system at SCE&G's Yemassee Substation  
19 near Yemassee, South Carolina. The Commission approved the siting of these lines in  
20 Docket No. 2002-284-E.

21 At our Fairfield Pump Storage facilities, we completed replacement of the last  
22 two (of a total of eight) turbine runners. These eight new runners are more efficient and

1 increase the facility's capacity by a total of 48 MW. The total cost for the improvements  
2 on the last two runners amounts to approximately \$5.2 million.

3 In addition, at Wateree Station, both low temp re-heat (RH) tubes and high temp  
4 RH tubes were worked on at a cost of about \$10.2 million. Further, the fly ash system at  
5 Wateree underwent construction to reburn fly ash to reduce the amount of unburned  
6 carbon, which in turn improves unit efficiency, increases the sale potential for fly ash,  
7 and significantly reduces the need for fly ash storage in ash disposal areas (i.e., ash  
8 ponds, landfills, etc.). This work on the fly ash system cost about \$4.7 million.

9 At Steven's Creek, the Company performed maintenance related to dam  
10 stabilization that cost approximately \$1.5 million.

11 These various construction efforts that reflect major improvements and  
12 maintenance on the Company's electric power production system represent a total capital  
13 cost of approximately \$25.7 million.

14 I also note for the Commission that the Company is committing and adding  
15 resources to meet the new industry standards and requirements that have been established  
16 as a result of the North American Electric Reliability Council (NERC) investigation into  
17 the blackout that affected the midwestern and northeastern states during the summer of  
18 2003. Some of the new requirements are in the area of training, computer tools, real time  
19 engineering studies, and operating procedures. Compliance with these new standards  
20 will enhance the reliability of the grid and SCE&G's system. A reliable system reduces  
21 the potential for economic impact to our customers, state and region.

22 **Q. PLEASE SUMMARIZE THE PERFORMANCE OF THE COMPANY'S POWER**  
23 **PRODUCTION UNITS FOR THE TEST PERIOD.**

1     **A.**             Overall, SCE&G's power production units have operated efficiently and  
2             dependably in the twelve-month period of April 1, 2003, through March 31, 2004. In  
3             fact, the Company's power plants have operated better than the NERC national 5-year  
4             (1998-2002) average for forced outage rates and with reasonable heat rates.

5             SCE&G experienced a low system forced outage rate of 2.09% during the test  
6             year. "Forced outage rate" is the percentage of the total hours that generating units are  
7             forced out of service for various reasons, compared with the total hours in service for a  
8             period. The NERC national 5-year (1998-2002) average for forced outage rate for a  
9             comparable system was 5.07%.

10            Heat rate is a way to measure thermal efficiency of a power plant's fuel cycle. It  
11            is the number of BTUs of fuel required to generate one kilowatt-hour of electricity. The  
12            Company's heat rate for its system for the test year was 9,669 BTU/kWh, which is  
13            among the best in the nation. Our Cope Station had the best heat rate in our system at  
14            9,284 BTU/kWh/.

15            I am pleased to tell you that in the November 2003 issue of *Electric Light &*  
16            *Power Magazine*, SCE&G was recognized by having two of its plants listed in the 20  
17            most energy efficient coal fired plants in the nation for 2002. Cope Station ranked 10<sup>th</sup> at  
18            9,415 Btu/kWh and Williams Station ranked 18<sup>th</sup> at 9,602 Btu/kWh. In that issue, Cope  
19            was listed as the 8<sup>th</sup> best in the nation in the list of the top 20 cleanest coal-fired power  
20            plants ranked by sulfur dioxide emission rates and ranked 19<sup>th</sup> in capacity factor at  
21            89.8%.

22     **Q.     PLEASE COMMENT ON THE V. C. SUMMER LICENSE EXTENSION.**

1     **A.**             In April 2004, the Nuclear Regulatory Commission (NRC) approved SCE&G's  
2             application for a 20-year license extension for its V. C. Summer Nuclear Station. The  
3             new license will allow the plant to operate through 2042. Ongoing operation of the  
4             nuclear station allows SCE&G to continue to generate almost 700 megawatts of power  
5             for the Company's system. It also provides nearly 750 jobs at the plant site and  
6             contributes millions of dollars annually to the Fairfield County tax base. The Summer  
7             Station, which was issued a full power operating license by the NRC in 1982 and began  
8             commercial operations in 1984, produces approximately 14% of SCE&G's generating  
9             capacity.

10    **Q.     PLEASE EXPLAIN THE DEVELOPMENT OF THE GRIDSOUTH RTO.**

11    **A.**             As I reviewed with the Commission in Docket 2002-223-E, on December 20,  
12             1999, FERC issued its Order No. 2000 which required utilities regulated by FERC to file  
13             a plan to join or form a regional transmission organization (RTO), or to provide an  
14             explanation as to why this could not be accomplished. Order 2000 was a major step by  
15             FERC in its progression to expand the U.S. electricity markets and to provide FERC  
16             greater regulatory controls over the transmission business. It continued and increased the  
17             initiatives begun by FERC Order 888. Consequently, there were industry efforts to form  
18             RTOs. Utilities and stakeholders actively advanced with RTO filings for the Midwest  
19             RTO, the Alliance RTO and GridFlorida. The Texas (ERCOT) ISO, Pennsylvania-New  
20             Jersey-Maryland ISO, the California ISO, and the power pools and ISOs of New  
21             Englands were already in place.

22             In response to these initiatives and mounting pressure to join an RTO, SCE&G  
23             had been studying the possible structure of RTOs and determined that the most desirable

1 alternative for its transmission business was the formation of a “Carolinas” RTO.  
2 SCE&G felt that an RTO covering the North Carolina-South Carolina region would best  
3 suit SCE&G customers and the Company for several reasons. The RTO would be  
4 focused in its scope and, therefore, would be attuned to the customer and system needs  
5 for the Carolinas. SCE&G also believed that its cooperation with Duke Power and  
6 Progress Energy-Carolinas (Progress) (formerly Carolina Power and Light Company)  
7 would provide a smooth transition to the functioning of an RTO, since the three  
8 companies have a long and positive history of operating their systems in concert. Thus,  
9 SCE&G, Duke Power and Progress joined forces to create the GridSouth RTO.

10 The GridSouth RTO filing was submitted to FERC by SCE&G, Duke and  
11 Progress. Pursuant to the filing, the three utilities were to retain system expansion  
12 planning for the Carolinas, native load concerns would be preserved, and the South  
13 Carolina PSC and North Carolina Public Utilities Commission would retain jurisdiction  
14 over retail electric service, including the transmission component. The GridSouth  
15 proposal also seemed to accomplish FERC’s articulated objectives.

16 The Companies made their GridSouth filing on October 16, 2000, and FERC gave  
17 conditional approval for the RTO in March 2001. FERC’s consideration of the  
18 GridSouth proposal was interrupted by the commencement of the regional mediations  
19 begun in the summer of 2001 by FERC, and the three companies examined and  
20 considered some modifications to the original GridSouth filing to accommodate federal,  
21 state and stakeholder interests.

22 In order to meet FERC’s deadlines, the three companies worked to physically and  
23 operationally assemble the planned GridSouth entity during the Fall 2000-Spring 2002

1 period given the commitment of other utilities in the region to form an RTO and the  
2 general industry direction. Land was procured and a facility constructed in Fort Mill,  
3 S.C. The companies desired to preserve placement of the GridSouth business in the  
4 Carolinas to provide investment, infrastructure and jobs, and its offices were located in  
5 our state. Operating systems and related hardware, software, and other system supports,  
6 and the related design and installation of these systems, were contracted for and pursued.  
7 Some staffing was commenced. Throughout this process, the companies controlled costs  
8 and made efficient decisions regarding building the RTO system.

9 Notwithstanding FERC's apparent regulatory objectives under Order No. 2000,  
10 and the efforts of SCE&G to meet those objectives, a change in the leadership at FERC  
11 resulted in a dramatic change in that agency's regulatory objectives. After this change,  
12 the formation of GridSouth was no longer consistent with the nation's transmission  
13 requirements as envisioned by new FERC Chairman Pat Wood and others, and on June  
14 18, 2002, the GridSouth RTO project was suspended.

15 **Q. WILL YOU GIVE THE COMMISSION SOME EXAMPLES OF FERC ACTION**  
16 **WHICH LED TO THE SUSPENSION OF THE PROJECT?**

17 **A.** Dramatic shifts in FERC policy towards RTOs, and toward matters of  
18 state/federal jurisdiction, caused the three utilities to decide to slow down, and ultimately  
19 suspend, the GridSouth project. The three companies were concerned with the FERC's  
20 inconsistent direction for RTO structuring. For example, Chairman Wood announced an  
21 initiative to issue a "giga-NOPR" (Notice of Proposed Rulemaking) to deal with RTO,  
22 transmission and market issues. The FERC issued its Standard Market Design (SMD)  
23 NOPR in July 2002. Although FERC has not withdrawn Order 2000, it has dramatically

1 altered the path being followed by SCE&G through GridSouth. FERC's SMD effort  
2 would expand its regulatory reach and raises many more questions than it answers. Until  
3 the regulatory future becomes more certain, the structure, operational requirements, and  
4 responsibilities of RTOs, particularly one like GridSouth, is virtually unknowable. There  
5 is great concern in regulatory and legal circles today about FERC's efforts to expand  
6 jurisdiction over matters historically regulated at the State level, and about its one-size-  
7 fits-all approach to regional transmission structures. There is also concern that FERC's  
8 approach to regional structures today is premised on the disappearance of vertically  
9 integrated utilities like SCE&G.

10 **Q. SHOULD THE COMPANY'S EXPENDITURES ON GRID SOUTH BE**  
11 **RECOVERED AT THIS TIME?**

12 **A.** Yes. SCE&G's participation in GridSouth was for the express purpose of  
13 maintaining local control in, and a local presence for, the entity running the electric  
14 transmission grid in the Carolinas. The participation was a prudent and logical response  
15 to the FERC objectives at the time. Indeed, in Order 2000 the FERC put tremendous  
16 regulatory pressure on utilities to undertake the formation of an RTO. Also, it is no  
17 secret that the formation of an RTO in the Southeast has been a prime objective of the  
18 FERC for the last few years.

19 Given these pressures and the environment at the FERC, SCE&G's actions to  
20 implement and ultimately to suspend the GridSouth initiative were based on its interest in  
21 being responsive to FERC's early objectives, while at the same time preserving State  
22 jurisdiction and local control over regional transmission. All assets of GridSouth have  
23 now been disposed of and there will be no future utilization of this vehicle for



1 transmission, or any other purposes. Our efforts were a prudent response to those  
2 regulatory objectives, and, thus, it is reasonable for the Commission to find that  
3 SCE&G's involvement in GridSouth was prudent and the costs expended fully  
4 recoverable. The Commission previously addressed the recovery of GridSouth costs in  
5 Docket 2002-223-E, Order No. 2003-38. It concluded that "it is premature to allow the  
6 recovery of GridSouth costs at the retail level at this time" (p. 17) in that the future  
7 utilization of that entity was uncertain. This is no longer the case. GridSouth is now only  
8 a shell entity with no personnel, assets of value or capabilities.

9 **Q. WILL YOU PLEASE COMMENT ON THE COMPANY'S PROPOSAL TO**  
10 **RECOMPUTE COAL INVENTORY?**

11 **A.** Yes. You will note in Ms. Walker's testimony that the Company proposes an  
12 adjustment to coal inventory. This is necessary to avoid a current aberration in coal  
13 inventory and more accurately reflect our normal and typical inventory levels. Currently,  
14 our coal inventory is unusually low because of a tight coal market and serious difficulties  
15 being experienced in rail transportation. These problems are beyond the control of any  
16 utility. You will recall that Gerhard Haimberger, our General Manager – Fuel  
17 Procurement, discussed these issues with you in our most recent fuel case (Docket No.  
18 2004-2-E). The Company adheres to operating policies designed to maintain an  
19 inventory of coal at each of its coal-fired plants sufficient to meet each plant's forecasted  
20 operating requirements. During the test period, our inventories have been atypically low  
21 for the reasons just stated. We are making every effort to restore coal inventories to more  
22 normal levels. Therefore, we propose to adjust coal inventory to more accurately reflect  
23 typical levels for use in our test year calculations.

1   **Q.     PLEASE DISCUSS YOUR EFFORTS TO ENHANCE SAFETY AND**  
2       **OPERATING EFFICIENCIES AND TO MINIMIZE COST.**

3   **A.**           Always at the top of the list is the safety of our employees, and at SCE&G we  
4       have continued to place emphasis on safety. As a result, we have achieved an accident  
5       frequency rate (AFR) of 1.86 in 2003 (second quartile of Southeastern Electric Exchange  
6       (SEE) companies), a good record, considering the inherently dangerous nature of the  
7       work many of our employees perform. We had the fewest vehicle accidents of the  
8       reporting companies. Our focus on safety is primarily to ensure that our employees work  
9       in as safe a manner and environment, as possible. Our low AFR has improved employee  
10      performance and efficiency while reducing expenses related to accidents.

11               Also in the context of employee efficiency, we have implemented a craft training  
12      program in partnership with Orangeburg-Calhoun Technical College. This program is  
13      accredited by the National Center for Construction Education and Research (NCCER). It  
14      provides our company with a more skilled and efficient workforce. We have also  
15      partnered with the Electric Power Research Institute (EPRI) to develop the first  
16      comprehensive fossil operator training program.

17               SCE&G has established various “working groups” to ensure that we are operating  
18      in an efficient manner. These working groups have identified a number of policy and  
19      procedure changes that have improved our productivity. For example, one group worked  
20      to improve communications between Fossil/Hydro Operations and System Dispatch.  
21      This group identified and implemented changes that resulted in a 7.7% percent increase  
22      in output from the Fairfield Pumped Storage Facility and a resulting fuel savings.

1           Also, our Company has implemented a new process for returning substations to  
2 service following an outage. As a result of this change, we are able to return electric  
3 service to some customers who otherwise would have been out of service until the full  
4 circuit could be activated.

5           SCE&G is implementing technology and procedures to improve our  
6 responsiveness, productivity and reliability. SCE&G is increasing the use of its computer  
7 aided dispatch system (CAD) in our service trucks. This benefits us by providing our  
8 employees with electronic order information resulting in less paperwork and greater  
9 efficiency in completing both emergency and routine customer orders. SCE&G also is  
10 expanding its SCADA system which allows dispatchers to access our system remotely as  
11 opposed to having to send crews out to specific circuits. This, in turn, improves our  
12 reliability and decreases the duration of customer outages.

13           From a facilities perspective, we have achieved a number of notable efficiencies  
14 which have increased the productivity of our generating plants, which bear mentioning  
15 here.

16           I have previously discussed our heat rates for the test period. This is the most  
17 recent step in a continuing process of improvement. The heat rate improvements made  
18 over the past nine years now save our customers the expense of approximately 100,000  
19 tons of coal per year.

20           Our V. C. Summer Nuclear Plant has gained an estimated 5 megawatts in  
21 generation over the past few years due to various improvements undertaken at the plant.

22           Our Fossil Hydro generation increased its output by 1,100 megawatts (a 28% total  
23 peak capacity increase at Fairfield Pump Storage, Urquhart, Savannah River Site (D

1 Power Block), and the added Jasper Facility). This 28% increase in capacity was  
2 accomplished with an increase in fossil plant personnel of only 6%, or 40 additional  
3 employees.

4 We have converted to oxygenated water treatment at our Wateree, Williams, and  
5 Canadys facilities, thereby reducing chemical cleaning cycles, improving cycle  
6 chemistry, and reducing scheduled outage time. The resulting savings from these  
7 conversions was approximately \$143,000 per year. The conversions also extend the  
8 useful life of the boilers through reduced corrosion.

9 Our Carbon Burn Out unit, located at Wateree Station, provides a marketable ash  
10 product and avoids costly landfill wastes at Wateree and McMeekin Stations. The heat  
11 value of the carbon in the ash is used at Wateree to improve the heat rate. This  
12 equipment eliminates as much as 260,000 tons of combustion by-product being land  
13 filled each year.

14 **Q. DOES SCE&G PROVIDE PROGRAMS FOR CUSTOMER INFORMATION AND**  
15 **ASSISTANCE?**

16 **A.** Yes. We pursue a variety of measures to inform our customers. These consist of  
17 customer information bill inserts, brochures, pamphlets and other notices. The  
18 information includes how to enroll in the Company's Easy Payment Plan; door-hanger  
19 notices about meter reading contacts; guidance on bill paying options via online website  
20 or bank drafts; PSC legal notices on fuel cost hearings, and rate case filings; summaries  
21 of electric rates, notice of rate changes, and information about new wording changes on  
22 bills; lists of offices and phone numbers for assistance on paying heating bills; notice on

1 scheduled tree trimming activity; and a helpful guide for field personnel providing  
2 questions and answers in English or Spanish.

3 By way of specific programs, our customers can now access an on-line energy  
4 usage analysis tool to review the details of their electric and natural bills. Using this tool,  
5 customers can take a closer look at detailed monthly reports which include information  
6 such as average total cost per day for electricity, average kilowatts used per day and local  
7 temperatures. Providing customers with this information helps them to become more  
8 knowledgeable consumers and to better control their energy use and costs. SCE&G also  
9 expects to realize some efficiencies from this program, since our customers will be able  
10 to access information on-line that previously would have required a call to SCE&G's call  
11 center. This allows SCE&G customer service representatives to focus their attention on  
12 service calls such as those establishing and restoring electric service.

13 We have also initiated an energy awareness campaign featuring conservation  
14 information and a home energy checklist on the Company's web site and in our business  
15 offices.

16 Our customers can now receive and pay their electric bill on-line. For those  
17 customers who choose this option, it provides them with the convenience of paying bills  
18 from home with the click of a button. E-bills can also be a benefit to SCE&G as they  
19 decrease the expense associated with printing and mailing bills.

20 SCE&G also operates a Small Business Resource Center (SBRC). This is an on-  
21 line resource that is available to all business customers of SCE&G. The Small Business  
22 Resource Center provides business information on a number of topics including human

resources, marketing and the latest business news. In its first six months of operation nearly 6,500 individuals have visited the site.

Let me emphasize that only expenses related to customer information and safety are included in rate proceedings. Our company "image" advertising is a "below the line" (shareholder) expense.

**Q. ARE THERE ANY OTHER MATTERS YOU WISH TO DISCUSS WITH THE COMMISSION?**

**A.** Yes. Our company and our employees continue to be recognized for outstanding performance in and contributions to the communities in which we live and serve. Let me mention a few of which I am particularly proud.

In the Fall of 2002, in the ninth annual TQS national benchmark survey of large electric customers, SCE&G scored the highest in the nation in five of seven categories. We ranked first in the nation in electric service reliability and number one in overall value and overall satisfaction with price. The company also placed first in the areas of customer loyalty and account representation. In addition, SCE&G placed second in overall customer contacts and third in customer satisfaction. This was the fifth consecutive year that the company placed in TQS's Top 5.

We followed this performance in May 2004 by being ranked by TQS as first in the nation in overall customer satisfaction, account manager performance and the handling of customer initiated contacts. This was the second time in three years that the Company was ranked first in overall customer satisfaction by our largest electric customers. In this survey, we topped the charts for all four questions, including: 1) upper management can be trusted; 2) we refrain from deceptive business practices; 3) our

1 employees actively support their local communities; and 4) we have earned the respect of  
2 the business community. Our employees in all areas of the company are the reason we  
3 consistently receive these high rankings. Not only do our employees provide excellent  
4 customer service, but they live our company values of “Serve our Communities” and “Do  
5 what is right.” They have been recognized for doing so. It was interesting to me to note  
6 that SCE&G was the only utility in the nation where all large customers surveyed could  
7 accurately provide the name of their account manager.

8 In December 2002, the Home Builder Association of Greater Columbia  
9 designated SCE&G as its corporate member of the year in recognition of outstanding  
10 service.

11 From an operations perspective, our performance has been recognized as well. In  
12 November 2003, our Urquhart Station was selected one of the world’s top 12 generating  
13 plants of 2003 by Platts Power Magazine. That industry trade journal recognized  
14 Urquhart as one of the most outstanding plants for our success in our repowering project  
15 which turned a 50-year-old coal-fired plant into a modern, efficient, and more  
16 environmentally friendly natural gas-burning facility.

17 I mentioned previously that SCE&G and its employees are integrally involved in  
18 the communities we serve. Here are some examples of that involvement. As stated by  
19 Mr. Timmerman, SCE&G provides funding for a Homework Center network located at  
20 10 sites throughout our service area. This support provides a certified teacher who  
21 manages each center, a teacher or teaching assistant, snacks, and student incentives. In  
22 addition to the academic assistance and encouragement offered to participating students,  
23 we have used these centers and other sites to present our “Safety City” programs. This is

1 a public safety education program for families, schools, youth groups, adult groups,  
2 contractors, emergency personnel and other organizations, emphasizing the importance of  
3 public awareness when it comes to injury-related incidents that could result from  
4 improper contact with electricity.

5 We have some programs which the company performs jointly with our  
6 employees. For example, last year SCE&G and company employee volunteers partnered  
7 with the Governor's Office for Economic Opportunity to weatherize three homes for low-  
8 income families in Columbia and Florence. Through SCE&G's contribution of  
9 approximately \$40,000, state-contracted crews undertook to weatherize an additional 36  
10 homes throughout the company's service territory.

11 Our company made a donation of \$25,000 to Palmetto Health Children's Hospital  
12 to renovate four playrooms for children ranging in age from infants to teenagers. New  
13 television sets have been provided for the pediatric intensive care unit. For infants and  
14 toddlers, a large colorful train mural has been mounted on one wall in a special room  
15 which holds games and activities at eye level for young patients. The room for school age  
16 children now contains new computer monitors and video games. All of these efforts are  
17 to make the hospital more like home for these children and to reduce the inherent  
18 emotional trauma of their hospitalization.

19 Since 1983 the SCE&G Employee Good Neighbor Fund has been dedicated to  
20 helping needy families and individuals in South Carolina. Throughout each year, the  
21 Good Neighbor Fund provides assistance to people who need help making mortgage  
22 payments or buying medical prescriptions. During the holiday season, the Good  
23 Neighbor Fund's Christmas Project provides baskets of food and toys to families who



1 would otherwise be without them at gift-giving time. Last year (2003), Company  
2 employees assembled and distributed Good Neighbor Fund packages to over 400  
3 families.

4 Suffice it to say, our employees are the heart of SCE&G in more ways than one.

5 **Q. PLEASE DISCUSS THE RELATIONSHIP BETWEEN THE COMPANY'S**  
6 **REQUEST FOR ADDITIONAL REVENUE AND ITS ABILITY TO MEET THE**  
7 **SERVICE NEEDS OF ITS CUSTOMERS AND THE ECONOMIC NEEDS OF**  
8 **THE COMPANY.**

9 **A.** I have outlined for the Commission the major capital needs which the Company  
10 must address in these proceedings. These investments are essential to the Company's  
11 ability to reliably meet the needs of our residential, industrial, and commercial customers  
12 and to meet the requirements of those regulatory agencies to which we are accountable.  
13 As we attempt to access capital markets and obtain favorable terms to finance our capital  
14 needs, we must negotiate from a position of financial stability. By that I mean that we  
15 must maintain our Single-A rating for senior debt and must present an appealing  
16 investment opportunity when we take new shares to the market. Therefore, the rate relief  
17 we seek in this docket is very important to our Company. Our Chief Financial Officer,  
18 Kevin Marsh, and witnesses, Mr. Thomas Osborne, Ms. Julie M. Cannell and Dr. Burton  
19 Malkiel discuss the capital markets in detail and the critical return which SCE&G must  
20 realize. Importantly, Mr. Marsh also recounts our past regulatory history before this  
21 Commission, the balanced regulatory climate which you have created in which our  
22 Company has historically operated, and the results enjoyed by our customers and our  
23 Company as a consequence of your oversight.

1    **Q.       DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

2    **A.**Yes, it does.